Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO Complete if Known 10/565,126 Application Number INFORMATION DISCLOSURE Filing Date September 18, 2006 STATEMENT BY APPLICANT **GRANDI** First Named Inventor Group Art Unit 1645 (use as many sheets as necessary) **Examiner Name** Baskar PP020663.0004 Sheet of 15 Attorney Docket Number

	U.S. PATENT DOCUMENTS						
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant		
Initials *	No.1	Number - Kind Code ² (<i>if known</i>)	MM-DD-YYYY	or Cited Document	Passages or Relevant Figures Appear		

		FOREIGN PA	TENT DOCU	MENTS		
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T^6
		OTHER PRIOR ART NON P.	ATENT LITE	RATURE DOCUM	II Ents	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITA the item (book, magazine, journal, ser number(s), publish	ial, symposium		page(s), volume-issue	T ²
/P.B./		ABBAS et al., <u>Cellular and Molecula</u> 2000	ır Immunolog	gy, 4th ed., Chapte	r 15, pages 360-62,	
0000000000		AMARA et al., "Molecular detection antibodies," Neurosci. Lett. 185, 14			ng specific	
000000000000000000000000000000000000000		ARESCHOUG et al., "Group B streptococcal surface proteins as targets for protective antibodies: identification of two novel proteins in strains of serotype V.," Inf. Immun. 67(12), 6350-57, Dec. 1999				
000000000000000000000000000000000000000		BANKS et al., "Progress toward characterization of the Group A Streptococcus metagenome: Complete genome sequence of a macrolide-resistant serotype M6 strain," J. Infectious Diseases 190, 727-38, August 15, 2004				
999900000000		BARNETT & SCOTT, "Differential re pyogenes by two sortase gene hom	-	·	•	
000000000000000000000000000000000000000		BARNETT et al., "A Novel Sortase, SrtC2, from Streptococcus pyogenes Anchors a Surface Protein Containing a QVPTGV Motif to the Cell Wall," Journal of Bacteriology, Vol. 186, No. 17, pp. 5865-5875, September 2004				
000000000000000000000000000000000000000		BECKMANN <i>et al.</i> , "Identification of Novel Adhesins from Group B Streptococci by Use of Phage Display Reveals that C5a Peptidase Mediates Fibronectin Binding," <i>Inf. Immun. 70</i> , 2869-76, June 2002				
300000000000000000000000000000000000000	BESSEN <i>et al.</i> , "Genomic Localization of a T Serotype Locus to a Recombinatorial Zone Ending Extracellular Matrix-Binding Proteins in Streptococcus <i>pyogenes</i> ," <i>Infection and Immunity</i> , Vol. 70, No. 3, pp. 1159-1167, March 2002					
V		BLACK et al: "Streptococcus pneum Accession No. AAV42990, Novemb		eptide coding regio	n"; GENBANK	
/P.B./	BLACKBURN et al. "The end of the (DNA) line " Nature Structural Biology 7, 847-49					

Examiner Signature	/Padmavathi Baskar/	Date Considered	11/04/2009
-----------------------	---------------------	--------------------	------------

PP020663.0004

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

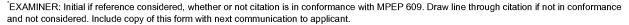
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Substitute for form 1449A/PTO Complete if Known 10/565,126 Application Number INFORMATION DISCLOSURE Filing Date September 18, 2006 STATEMENT BY APPLICANT **GRANDI** First Named Inventor 1645 Group Art Unit (use as many sheets as necessary) **Examiner Name** Baskar

Attorney Docket Number

	U.S. PATENT DOCUMENTS						
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant		
Initials *	No.1	Number - Kind Code ² (<i>if known</i>)	MM-DD-YYYY	or Cited Document	Passages or Relevant Figures Appear		

		FOREIGN PA	TENT DOCL	IMENTS				
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T^6		
		OTHER PRIOR ART NON F	ATENT LITE	RATURE DOCUM				
Examiner Initials *								
/P.B./		BORK et al., "Powers and pitfalls in Research 10, 398-400, 2000	ORK et al., "Powers and pitfalls in sequence analysis: the 70% hurdle," Genome					
200000000000		BOROVEC et al., "Synthesis and as cells," J. Virol. 67, 3095-301, June	•	patitis A virus-speci	fic proteins in BS-C-1			
300000000000		1	BOWIE et al., "Deciphering the message in protein sequences: tolerance to amino acid substitution," Science 257, 1306-10, 1990					
20000000000		BRODEUR et al., "Identification of group B streptococcal Sip protein, which elicits cross-protective immunity," Inf. Immun. 68(10), 5610-8, Oct. 2000						
000000000000000000000000000000000000000		BURGESS et al., "Possible dissociat of heparin-binding (acidic fibrobla activities by site-directed mutager 2129-38, 1990	st) growth fa	ctor-1 from its rece	ptor-binding			
30000000000		CHUNG et al., "chlorosome protein	n," NCBI Acce	ession N o. 2115394	F, July 10, 1992			
		CLANCY et al., "Cloning and Characterization of a Novel Macrolide Efflux Gene, mreA, from Streptococcus agalactiae," Antimicrobial Agents and Chemotherapy 41, 2719-23, 1997						
000000000000000000000000000000000000000	COLLINS et al., "Mutation of the principal sigma factor causes loss of virulence in a strain of the Mycobacterium tuberculosis complex," Proc. Natl. Acad. Sci. USA 92, 8036-40, 1995							
		DALE et al., "New Protective Antig 1261-68, May 1999	DALE et al., "New Protective Antigen of Gorup A Streptococci," J. Clin. Invest. 103, 1261-68, May 1999					
/P.B.	/	DALE et al., "Recombinant, octava Vaccine 14, 944-48, 1996	lent group A	streptococcal M pr	otein vaccine,"			

Examiner Signature	/Padmavathi Baskar/	Date Considered	11/04/2009
-----------------------	---------------------	--------------------	------------





Sheet

of

15

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO Complete if Known 10/565,126 Application Number INFORMATION DISCLOSURE Filing Date September 18, 2006 STATEMENT BY APPLICANT **GRANDI** First Named Inventor 1645 Group Art Unit (use as many sheets as necessary) **Examiner Name** Baskar 15 PP020663.0004 Sheet of Attorney Docket Number

	U.S. PATENT DOCUMENTS						
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant		
Initials *	No.1	Number - Kind Code ² (if known)	MM-DD-YYYY	or Cited Document	Passages or Relevant Figures Appear		

		FOREIGN PA	TENT DOCU	MENTS			
Examine Initials*	Cite No.1	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	L_{e}	
		OTHER PRIOR ART NON F	ATENT LITE	RATURE DOCUM	ENTS		
Examine	er Cite	Include name of the author (in CAPIT the item (book, magazine, journal, se number(s), publist	rial, symposium		page(s), volume-issue	T ²	
/P.B./		, , , ,	DALE, "Multivalent group A streptococcal vaccine designed to optimize the mmunogenicity of six tandem M protein fragments," Vaccine 17, 193-200, 1999				
99999999999		DATABASE EMBL, Accession No. A ID No: 192, March 19, 1999	AX13129, Ent	erococcus faecalis	genome contig SEQ		
000000000000000000000000000000000000000		DATABASE EPO Proteins, EBI Acces W00209818," February 17, 2003	DATABASE EPO Proteins, EBI Accession No. AX605513, "Sequence 3442 from WO0209818," February 17, 2003				
)		DATABASE Geneseq, "Group B Street Accession No. GSP:AAY91320, Mar		rotein sequence SE	Q ID NO:49," EBI		
000000000000000000000000000000000000000		1	DATABASE Geneseq, "Streptococcus agalactiae protein, SEQ ID 2382," EBI Accession No. GSP:ADV81242, February 24, 2005				
w.coopeeeeee			DATABASE Geneseq, "Fibrinogen-binding polypeptide, SEQ ID NO:17," EBI Accession No. GSP: ADS93952, December 2, 2004; revised in 2007				
		DATABASE Geneseq, EBI Accession No. GSP: ABP30134, "Streptococcus polypeptide SEQ ID NO:9444," July 2, 2002					
\/		DATABASE Geneseq, EBI Accession SEQ ID NO:3746," July 2, 2002; rev		P27285, "Streptoc	occus polypeptide		
/P.B	./	DATABASE Genseq, "Protein encode Accession No. ABU46451, June 13	•	yotic essential gen	ie #319788,"		

Evaminor		Data	4.4/0.4/0.00
Examiner Signature	/Padmavathi Baskar/	Date Considered	11/04/2009

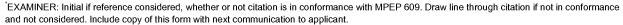


Substitute for form 1449A/PTO Complete if Known 10/565,126 INFORMATION DISCLOSURE Application Number STATEMENT BY APPLICANT Filing Date September 18, 2006 **GRANDI** First Named Inventor 1645 Group Art Unit (use as many sheets as necessary) **Examiner Name** Baskar PP020663.0004 Sheet of 15 Attorney Docket Number

U.S. PATENT DOCUMENTS						
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant	
Initials *	No.1	Number - Kind Code ² (if known)	MM-DD-YYYY		Passages or Relevant Figures Appear	

		FOREIGN PA	TENT DOCU	MENTS				
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T^6		
		OTHER PRIOR ART NON F	ATENT LITE	RATURE DOCUM	ENTS			
Examiner Initials *	Cite No.1	Include name of the author (in CAPIT the item (book, magazine, journal, se number(s), publisl	rial, symposiun		page(s), volume-issue	T²		
/P.B./		-	DATABASE JPO Proteins, "Nucleic acid and protein originating in group B treptococcus," EBI Accession No. JPOP:BD629260, July 17, 2003					
555555555555555			DATABASE SWISSPROT[Online] 01 Oct 2002, accession no. EBI, Database accession no. Q9PGX9, Hypothetical protein XF0167					
200000000000000000000000000000000000000		DATABASE UniProt [Online] 1 Mar retrieved from EBI accession no. U 87.2% identity with SEQ ID NO:209	NIPROT: Q8E		• •			
000000000000000000000000000000000000000		DATABASE UniProt [Online], 22 No protein," retrieved from EBI acces ID NO:20906; abstract		•	•			
000000000000000000000000000000000000000		DE BOEVER et al., "Enterococcus for nucleotide sequence and genetic and 37, 1327-41, 2000			•			
000000000000000000000000000000000000000		DITTMER et al., "Treatment of infe oligodeoxynucleotides containing 2003			•			
		DUEZ, "Enterococcus hirae mraR, mraW, yIIC and ftsZ partial genes,"						
1		ELLIS, <u>Vaccines</u> , Chapter 29, Plotki pages 568-75, 1988	n et al., eds.,	W.B. Saunders Cor	npany (Philadelphia),			
/P.B./		EXAMINATION REPORT for NZ 560	966, March 4	, 2009, 2 pages				

Examiner Signature	/Padmavathi Baskar/	Date Considered	11/04/2009
-----------------------	---------------------	--------------------	------------



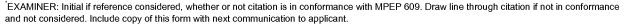


Substitute for form 1449A/PTO Complete if Known 10/565,126 INFORMATION DISCLOSURE Application Number Filing Date September 18, 2006 STATEMENT BY APPLICANT **GRANDI** First Named Inventor 1645 Group Art Unit (use as many sheets as necessary) **Examiner Name** Baskar PP020663.0004 Sheet of 15 Attorney Docket Number

	U.S. PATENT DOCUMENTS					
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant	
Initials *	No.1	Number - Kind Code ² (if known) MM-DD-YYYY		of Cited Document	Passages or Relevant Figures Appear	

		FOREIGN PA	TENT DOCL	IMENTS		
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T^6
		OTHER PRIOR ART NON P	ATENT LITE	RATURE DOCUM	ENTS	
Examiner Initials *						
/P.B./	P.B./ FERRETTI et al., "Putative surface exclusion protein," GENBANK Accession No. Q9A1H3, October 31, 2006					
2000000000		FERRETTI et al: "Streptococcus pyogenes M1 GAS strain SF370, Section 87 of 167 of the complete genome" DATABASE Accession No. AE006558.				
0000000000		GLASER et al., "Genome sequence invasive neonatal disease," Mol. M	•		athogen causing	
000000000		GRANDI & ZAGURSKY, "The impact and lessons," Expert. Rev. Vaccine.	-		ry: achievements	
000000000000000000000000000000000000000		Grandi, "Genomics and Proteomic Functional Biology of Whole Organ Sons, chapter 20, 2006				
0000000000		GREENSPAN et al., "Defining epito 7, 936-37, 1999	pes: It's not a	as easy as it seems,'	' Nature Biotechnol.	
200000000000000000000000000000000000000		GUTEKUNST <i>et al.,</i> "Analysis of Rog Expression in <i>Streptococcus agalac</i>	-			
	GUTIERREZ et al., "insertional Mutagenesis and Recovery of Interrupted Genes of Streptococcus mutans by Using Transposon Tn917: Preliminary Characterization of Mutants Displaying Acid Sensitivity and Nutritional Requirements," J. Bacteriol. 178, 4166-75, July 1996					
/P.B./		4166-75, July 1996 GUTTIEREZ et al., "Streptococcus mutans ProX (pouABC) gene, partial cds; YlxM (ylxM) gene, complete cds; Ffh (ffh) gene, complete cds, alternatively spliced; SatC (satC) and SatD (satD) gene, complete cds; and SatE (satE) gene, partical cds," GENBANK Accession No. U88582, April 3, 2001				

Examiner Signature	/Padmavathi Baskar/	Date Considered	11/04/2009	





Substitute for form 1449A/PTO Complete if Known 10/565,126 Application Number INFORMATION DISCLOSURE Filing Date September 18, 2006 STATEMENT BY APPLICANT **GRANDI** First Named Inventor 1645 Group Art Unit (use as many sheets as necessary) **Examiner Name** Baskar PP020663.0004 Sheet of 15 Attorney Docket Number

	U.S. PATENT DOCUMENTS					
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant	
Initials *	No.1	Number - Kind Code ² (if known) MM-DD-YYYY		of Cited Document	Passages or Relevant Figures Appear	

		FOREIGN PA	TENT DOCU	MENTS				
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T^6		
		OTHER PRIOR ART NON P	ATENT LITE	RATURE DOCUM	LNTS			
Examiner Initials *	======================================							
/P.B./		GUZMAN et al., "Protective immune response against Streptococcus pyogenes in mice after intranasal vaccination with the fibronectin-binding protein SfbI," J. Infectious Disease 179, 901-06, 1999						
W000000000		HOLMES, "PSMA specific antibodie Opin. Invest. Drugs 10, 511-10, 200		iagnostic and thera	apeutic use," Exp.			
800000000		HONG, "unnamed protein product [Streptococcus pyogenes]," NCBI Accession No. BAB1603, one page, Oct. 3, 2000						
Жалана на 		HORVATH <i>et al.</i> , "Toward the deve vaccine of high purity and broad p 29;47(16):4100-4						
0000000000		HUGHS et al., "Identification of Maagalactiae," Inf. Immun. 70, 1254-	-		reptococcus			
000000000000000000000000000000000000000		International Preliminary Examina 02/34771) dated February 17, 200	•	or PCT/GB01/0478	9 (published as WO			
000000000000000000000000000000000000000	International Preliminary Examination Report for PCT/GB2003/001882 (published as WO 03/093306) dated August 18, 2004							
000000000000000000000000000000000000000		International Preliminary Examination Report for PCT/IB2005/036009 (published as WO 06/042027) dated April 11, 2007						
V			International Preliminary Examination Report for PCT/US2003/029167 (published as WO 04/041157) dated March 5, 2005					
/P.B./		International Preliminary Examination Report for PCT/US2004/024868 (published as WO 05/032582) dated February 6, 2006						

Examiner Signature	/Padmavathi Baskar/	Date Considered	11/04/2009
-----------------------	---------------------	--------------------	------------



Substitute for form 1449A/PTO Complete if Known 10/565,126 INFORMATION DISCLOSURE Application Number Filing Date STATEMENT BY APPLICANT September 18, 2006 First Named Inventor **GRANDI** 1645 Group Art Unit (use as many sheets as necessary) **Examiner Name** Baskar PP020663.0004 Sheet of 15 Attorney Docket Number

	U.S. PATENT DOCUMENTS					
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant	
Initials *	No.1	Number - Kind Code ² (if known) MM-DD-YYYY		of Cited Document	Passages or Relevant Figures Appear	

		FOREIGN PA	TENT DOCU	MENTS			
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T^6	
		OTHER PRIOR ART NON F	ATENT LITE	RATURE DOCUM	ENTS		
Examiner Initials *	Cite No.1	, the term (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue i					
/P.B./		International Preliminary Examination Report for PCT/US2004/030032 (published as WO 05/028618) dated March 16, 2006					
0000000000		International Search Report for PC August 27, 2002	T/GB01/0478	39 (published as W	O 02/34771) dated		
000000000		International Search Report for PC dated November 14, 2002	T/GB2003/00)1882 (published a	s WO 03/093306)		
0000000000		International Search Report for PC dated June 20, 2006	T/IB2005/03	6009 (published as	WO 06/042027)		
37700000000		International Search Report for PC WO 2006/069200)	T/US05/0464	91 dated June 26,	2007 (published as		
***************************************		International Search Report for PC dated August 2, 2004	T/US2003/02	9167 (published as	s WO 04/041157)		
		International Search Report for PCT/US2004/024868 (published as WO 05/032582) dated October 28, 2005					
000000000000000000000000000000000000000		International Search Report for PCT/US2004/030032 (published as WO 05/028618) dated December 6, 2005					
V		International Search Report for PC dated August 25, 2008	T/US2005/02	7239 (published as	s WO 06/078318)		
/P.B./		International Search Report for PCT/US2007/022838 (published as WO 08/108830) dated October 9, 2008					

Examiner Signature	/Padmavathi Baskar/	Date Considered	11/04/2009
-----------------------	---------------------	--------------------	------------



U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

PP020663.0004

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Substitute for form 1449A/PTO Complete if Known 10/565,126 INFORMATION DISCLOSURE Application Number Filing Date September 18, 2006 STATEMENT BY APPLICANT **GRANDI** First Named Inventor 1645 Group Art Unit (use as many sheets as necessary) **Examiner Name** Baskar

Attorney Docket Number

U.S. PATENT DOCUMENTS						
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant	Pages, Columns, Lines, Where Relevant	
Initials *	No.1	Number - Kind Code ² (if known)	MM-DD-YYYY	of Cited Document	Passages or Relevant Figures Appear	

		FOREIGN PA	TENT DOCU	MENTS			
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T^6	
		OTHER PRIOR ART NON F	ATENT LITE	RATURE DOCUM	ENTS		
Examiner Initials *	Cite No. ¹						
/P.B./		JOBLING et al., "Analysis of structure and function of the B subunit of cholera toxin by the use of site-directed mutagenesis," Mol. Microbiol. 5, 1755-67, 1991					
100000000000000000000000000000000000000		KALMAN et al., "Comparative genomes of Chlamydia pneumoniae and C. trachomatis," Nature Genetics 21, 385-89, April 1999					
000000000000000000000000000000000000000		KEHOE et al., "Nucleotide Sequence of the Streptolysin O (SLO) Gene: Structural Homologies between SLO and Other Membrane-Damaging, Thiol-Activated Toxins," Inf. Immun. 55, 3228-32, December 1987					
		KOCH et al., "Complexity and expr Natl. Acad. Sci. USA 89, 353-57, Ja		ns of the desmosor	mal adherins," Proc.		
***************************************		KUNST et al., "The complete geno subtilis," NCBI Accession No. CAB1		·	ve bacterium Bacillus		
	LACHENAUER et al., "A protective surface protein from the Type V Group B Streptococcus shares N-terminal sequence homology with the Alpha C Protein," Inf. Immun. 64, 4255-60, October 1996						
9000000000	LARSSON <i>et al.</i> , "Protection against experimental infection with group B streptococcus by immunization with a bivalent protein vaccine," <i>Vaccine 17</i> , 454-58, 1999						
		LAUER <i>et al.,</i> "Genome Analysis Re 105, July 1, 2005	eveals Pili in G	iroup B <i>Streptococ</i>	cus," Science 309,		
1/		LAZAR et al., "Transforming growth factor alpha: mutation of aspartic acid 47 and leucine 48 results in different biological activities," Mol. Cell. Biol. 8, 1247-52, 1988					
/P.B./		LE PAGE et al., "Streptococcus aga Accession No. AX134653, May 29,		nce 217 from WO	01/32882, GENBANK		

Examiner		Date	
Signature	/Padmavathi Baskar/	Considered	11/04/2009

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Sheet

of

15

Substitute for form 1449A/PTO Complete if Known 10/565,126 INFORMATION DISCLOSURE Application Number Filing Date STATEMENT BY APPLICANT September 18, 2006 First Named Inventor **GRANDI** 1645 Group Art Unit (use as many sheets as necessary) **Examiner Name** Baskar PP020663.0004 Sheet of 15 Attorney Docket Number

	U.S. PATENT DOCUMENTS									
Evaminar	Cite	Document Number	Publication Date	Name of Patentee or Applicant	Pages, Columns, Lines, Where Relevant					
Examiner Initials *	No.1	Number - Kind Code ² (<i>if known</i>)	MM-DD-YYYY	of Cited Document	Passages or Relevant Figures Appear					

		FOREIGN PA	TENT DOCU	MENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T^6			
		OTHER PRIOR ART NON F	ATENT LITE	RATURE DOCUM	ENTS				
Examiner Initials * Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of					page(s), volume-issue	T 2			
/P.B./		1	LEI et al., "Identification and immunogenicity of group A streptococcus culture supernatant proteins," Inf. Immunity 68, 6807-18, 2000						
0000000000		LEWIS, "Riddle of Biofilm Resistance," <i>Antimicrobial Agents and Chemotherapy</i> , Vol. 45, No. 4, pp. 999-1007, April 2001							
000000000		LINDAHL et al., "Surface proteins of other bacterial pathogens," Clinical		-	•				
000000000000000000000000000000000000000		MADOFF et al., "Maternal Immuni Polysaccharide-Beta C Protein Cor Serotypes," J. Clinical Invest. 94, 2	ijugate Elicits						
000000000		MAIONE et al., "Identification of a Multiple Genome Screen," Science			s Vaccine by				
		McMILLAN et al., "Identification al A streptococcal infections," Vaccir			andidates for group				
		McMILLAN et al., "Prospecting for Indian J. Med. Res. 119, 121-25, M		streptococcal vacc	ine candidates,"				
V		MEEHAN & OWEN, "Sequence 1 fr A68631, May 6, 1999	om Patent W	O9801561," GENB.	ANK Accession No.				
/P.B./		MICHEL <i>et al</i> : "Cloned alpha and beta C-protein antigens of group B Streptococci elicit protective immunity"; INFECTION AND IMMUNITY; vol. 59, no. 6, June 1991; pp 2023-2028.							

1		Dodmovathi Dookor	1		
ı	Examiner	/Padmavathi Baskar/	Date	11/04/2009	
ı	Signature		Considered	11/04/2000	



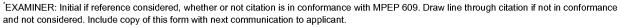
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Substitute for form 1449A/PTO Complete if Known 10/565,126 INFORMATION DISCLOSURE Application Number STATEMENT BY APPLICANT Filing Date September 18, 2006 **GRANDI** First Named Inventor 1645 Group Art Unit (use as many sheets as necessary) **Examiner Name** Baskar PP020663.0004 Sheet 10 of 15 Attorney Docket Number

U.S. PATENT DOCUMENTS									
	Cito	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant				
	Cite No. ¹	Number - Kind Code ² (if known)	MM-DD-YYYY		Passages or Relevant Figures Appear				

		FOREIGN PA	TENT DOCL	IMENTS		
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T^6
		OTHER PRIOR ART NON P	ATENT LITE	RATURE DOCUM	ENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPIT the item (book, magazine, journal, se number(s), publist	rial, symposiun		page(s), volume-issue	T ²
/P.B./		MOLLING et al., "Naked DNA for va	accine or the	rapy," J. Mol. Med.	75, 242-46, 1997	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		MORA et al., "Group A Streptococo protective antigens and Lancefield 46, October 25, 2005			_	
000000000000000000000000000000000000000		MUSSER, "The Next Chapter in Rev 2006	verse Vaccino	ology," Nat. Biotech	nol. 24, 157-58,	
000000000000000000000000000000000000000		NAKAGAWA et al., "Genome sequ reveals a large-scale genomic rear phage evolution," Genome Res. 13	rangement ir	n invasive strains an		
000000000000000000000000000000000000000		NAKATA et al., "MsmR, a specific pathogenicity region and cytolysin Microbiol. 57, 786-803, 2005	_	·		
		NAVARRE <i>et al.</i> , "Surface Proteins Targeting to the Cell Wall Envelope 63, No. 1, pp. 174-229, March 199	e," Microbiol			
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		NCBI News, table on page 4, "Micr 1998	obial Genom	es Available for BLA	AST Search," July	
		OREFICI et al., "Possible virulence Group B)," J. Clin. Microbiol. Infect		· -	tiae (Lancefiled	
/P.B./	PAOLETTI et al., "Neonatal mouse protection against infection with multiple group B					

Examiner Signature	/Padmavathi Baskar/	Date Considered	11/04/2009
-----------------------	---------------------	--------------------	------------





Substitute for form 1449A/PTO INFORMATION DISCLOSURE					Complete if Known	
				Application Number	10/565,126	
STATEMENT BY APPLICANT		Filing Date	September 18, 2006			
		First Named Inventor	GRANDI			
				Group Art Unit	1645	
(use as many sheets as necessary)				Examiner Name	Baskar	
Sheet	11	of	15	Attorney Docket Number	PP020663 0004	

	U.S. PATENT DOCUMENTS									
Evaminar	Cito	Document Number	Publication Date	Name of Patentee or Applicant	Pages, Columns, Lines, Where Relevant					
Examiner Initials *	Cite No. ¹	Number - Kind Code ² (<i>if known</i>)	MM-DD-YYYY	of Cited Document	Passages or Relevant Figures Appear					

		FOREIGN PA	TENT DOCU	MENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T^6			
		OTHER PRIOR ART NON F	ATENT LITE	RATURE DOCUM	ENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPIT the item (book, magazine, journal, se number(s), publisl	rial, symposiun		page(s), volume-issue	T ²			
/P.B./			PAOLETTI, "Surface structure of group B streptoccoccus important in human immunity," in <u>Gram Positive Pathogens</u> , Fischetti et al., eds., Chapter 14, pp. 137-53, 2000						
00060000000000000000000000000000000000	POURNARAS et al., "Pheromone responses and high-level aminoglycoside resistance of conjugative plasmids of Enterococcus faecalis from Greece," J. Antimicrobial Chemotherapy 46, 1013-16, 2000								
***************************************		PRITZLAFF et al., "Genetic basis fo streptococcus," Mol. Microbiol. 39			ctivity of group B				
200000000000000000000000000000000000000		PRITZLAFF <i>et al.</i> , "Streptococcus a GENBANK Accession No. AF15701			l sequence,"				
30000000		PROFT et al., "Identification and C Streptococcus pyogenes," J. Exp. N		•	-				
000000000000000000000000000000000000000		PUCCI et al., "Enterococcus faecal yllB, yllc, yllD, pbpC, mraY, murD, GENBANK Accession No. U94707,	murG, divlB, f	tsA and fitsZ genes					
000000000	QUINN, "The response of rheumatic and non-rheumatic children to streptolysin O concentrate," J. Clin. Invest. 36, 793-802, June 1957								
		RAMACHANDRAN <i>et al.</i> , "Two Distinct Genotypes of <i>prtF2</i> , Encoding a Fibronectin Binding Protein, and Evolution of the Gene Family in <i>Streptococcus pyogenes</i> ," <i>Journal of Bacteriology</i> , Vol. 186, No. 22, pp. 7601-7609, November 2004							
/P.B./		RODEWALD et al., "Neonatal mouse model of group b streptococcal infection," J. Infectious Diseases 166, 635-39, 1992							

Examiner Signature	/Padmavathi Baskar/	Date Considered	11/04/2009
-----------------------	---------------------	--------------------	------------

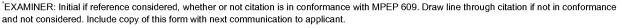


Substitute for form 1449A/PTO Complete if Known 10/565,126 Application Number INFORMATION DISCLOSURE Filing Date September 18, 2006 STATEMENT BY APPLICANT **GRANDI** First Named Inventor 1645 Group Art Unit (use as many sheets as necessary) **Examiner Name** Baskar PP020663.0004 Sheet of 15 Attorney Docket Number

	U.S. PATENT DOCUMENTS									
Evaminar	Cite	Document Number	Publication Date	Name of Patentee or Applicant	Pages, Columns, Lines, Where Relevant					
Examiner Initials *	No.1	Number - Kind Code ² (<i>if known</i>)	MM-DD-YYYY	of Cited Document	Passages or Relevant Figures Appear					

		FOREIGN PAT	ENT DOCU	MENTS		
Examiner Cite No.1		Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T^6
		OTHER PRIOR ART NON PA	TENT LITE	RATURE DOCUM	ENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAI the item (book, magazine, journal, seria number(s), publishe	l, symposiun		page(s), volume-issue	T ²
/P.B./		RODRIGUEZ-ORTEGA et al., "Charact proteins through analysis of the gro- Biotechnol. 24, 191-97, 2006				
9000000000		ROITT et al., Structure of Antigens, <u>I</u> and 7.8, 1998	mmunology	ر, 4th ed., Mosby, L	ondon, pages 7.7	
000000000000000000000000000000000000000		ROSINI et al., "Identification of nove structures in Streptococcus agalactic	_	_		
200000000000000000000000000000000000000		RUDENKO et al., "Selection for active expression site in Trypanosoma brue Biochem. Parisitol. 95, 97-109, 1998	cei can resu	It in deletion of the	old one," Mol.	
000000000000000000000000000000000000000		RUDINGER et al., "Characteristics of hormone sequence," in Peptide Hor 1976, pages 1-7		•		
000000000000000000000000000000000000000		SCHNEEWIND <i>et al.</i> , "Sequence and T6 Surface Protein of Group A Strep pp. 3310-3317, June 1990				
000000000000		SCHNEEWIND, "Structure of the Cell aureus," Science 268, 103-06, April 7		or of Surface Protei	ns in Staphylococcus	
200000000000000000000000000000000000000	SEGURA et al., "Streptococcus suis and group B Streptococcus differ in their interactions with murine macrophages," FEMS Immunol. Med. Microbiol. 21, 189-95, 1998					
		SEIZEN, "Multi-domain, cell envelop Leeuwenhoek 76, 139-55, 1999	e proteases	of lactic acid bacte	eria," Antonie von	
SIMPSON et al., "Xylella fastidiosa 9a5c, section 136 of 229 of the complete genome, /P.B./ GENBANK Accession No. AE003990, June 4, 2004						

Examiner Signature	/Padmavathi Baskar/	Date Considered	11/04/2009
-----------------------	---------------------	--------------------	------------





PP020663.0004

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Attorney Docket Number

Substitute for form 1449A/PTO Complete if Known Application Number **INFORMATION DISCLOSURE** 10/565,126 Filing Date September 18, 2006 **STATEMENT BY APPLICANT** First Named Inventor **GRANDI** Group Art Unit 1645 (use as many sheets as necessary) Examiner Name Baskar

	U.S. PATENT DOCUMENTS					
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant	Pages, Columns, Lines, Where Relevant	
Initials *	No.1	Number - Kind Code ² (<i>if known</i>)	MM-DD-YYYY	of Cited Document	Passages or Relevant Figures Appear	

		FOREIGN PA	TENT DOCL	IMENTS		
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T^6
		OTHER PRIOR ART NON P	ATENT LITE	RATURE DOCUM	L L	
Examiner Initials *	Cite No.1	Include name of the author (in CAPIT, the item (book, magazine, journal, seinumber(s), publish	ial, symposiun	title of the article (who n, catalog, etc.), date, country where publish	page(s), volume-issue	T ²
/P.B./		SMOOT et al., "Genome sequence M18 group A Streptococcus strain: Proc. Natl. Acad. Sci. USA 99, 4668	s associated ¹	with acute rheumat		
35555555555555		SPELLERBERG et al., "Streptococcu GENBANK Accession No. AF09378."			mplete sequence,"	
000000000000000000000000000000000000000		SPELLERBERG <i>et al</i> : "Identification Streptococcus agalactiae by ISSI tr 1999; pp 3212-3219.	-			
<u> </u>		STALHAMMAR-CARLEMALM <i>et al.</i> related to several group B streptod and promotes binding to human e 219.	coccal surfac	e proteins, confer p	rotective immunity	
000000000000000000000000000000000000000		STEPHENSON et al., "The Fap1 fim for the glycan moiety block the ad tooth model," Mol. Microbiol. 43,	hesion of <i>Str</i>	eptococcus parasar	·	
***************************************		SU et al., "Identification of a Xenor fission yeast Schizosaccharomyces		•	•	
		Supplementary Search report for E dated January 21, 2008	P 03799822	(corresponding to \	WO 04/041157)	
V		SUROVOV & FERRETTI, "Physical a of Streptococcus pyogenes," J. Bac				
/P.B./		TAKAMI et al., "Two component se regulation," NCBI Accession No. N				

Examiner Signature	/Padmavathi Baskar/	Date Considered	11/04/2009
-----------------------	---------------------	--------------------	------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Sheet

13

of

15

Substitute for form 1449A/PTO Complete if Known 10/565,126 Application Number INFORMATION DISCLOSURE Filing Date STATEMENT BY APPLICANT September 18, 2006 **GRANDI** First Named Inventor 1645 Group Art Unit (use as many sheets as necessary) **Examiner Name** Baskar PP020663.0004 Sheet of 15 Attorney Docket Number

	U.S. PATENT DOCUMENTS					
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant	
Initials *	No.1	Number - Kind Code ² (<i>if known</i>)	MM-DD-YYYY	or Cited Document	Passages or Relevant Figures Appear	

		FOREIGN PA	TENT DOCU	MENTS			
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T^6	
		OTHER PRIOR ART NON F	ATENT LITE	RATURE DOCUM	ENTS		
Examiner Initials *	Cite No.1	Include name of the author (in CAPIT the item (book, magazine, journal, se number(s), publisl	rial, symposium		page(s), volume-issue	T ²	
/P.B./		emerging human pathogen, seroty	TETTELIN et al., "Complete genome sequence and comparative genomic analysis of an emerging human pathogen, serotype V Streptococcus agalactiae," Proc. Natl. Acad. Sci. USA 99, 12391-96, September 17, 2002				
0000000000		TETTELIN et al., "Complete genome sequence of a virulent isolate of Streptococcus pneumoniae," Science 293, 498-506, 2001					
		TETTELIN et al., DATABASE EMBL, 2603V/R section 3 of 100 of the co					
		TETTELIN et al., Swiss-Prot Accession No. Q3DV91 for Streptococcus agalactiae strain 18R21, November 22, 2005					
		TIGHE et al., "Gene vaccination: plasmid DNA is more than just a blueprint," Immunology Today 19, 89-97, Feb. 1998					
000000000000000000000000000000000000000		TODD, "Antigenic Streptococcal Hemolysin," J. Exp. Med. 55, 267-80, 1932					
1/		TON-THAT & SCHNEEWIND, "Asse diphtheriae," Mol. Microbiol. 50, 1			rynebacterium		
/P.B./		TON-THAT et al., "Sortases and pil Corynebacterium diphtheriae," M			embly of		

Examiner	/Dodmovathi Dackar/	Date	
Signature	/Paumavaim baskai/	Considered	I 11/04/2009



Substitute for form 1449A/PTO Complete if Known 10/565,126 INFORMATION DISCLOSURE Application Number Filing Date September 18, 2006 STATEMENT BY APPLICANT GRANDI First Named Inventor 1645 Group Art Unit (use as many sheets as necessary) **Examiner Name** Baskar PP020663.0004 Sheet of 15 Attorney Docket Number

	U.S. PATENT DOCUMENTS					
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant	
Initials *	No.1	Number - Kind Code ² (<i>if known</i>)	MM-DD-YYYY	or Cited Document	Passages or Relevant Figures Appear	

		FOREIGN PA	TENT DOCU	MENTS		
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		OTHER PRIOR ART NON F	ATENT LITE	RATURE DOCUM	ENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPIT the item (book, magazine, journal, se number(s), publist	rial, symposium	•	page(s), volume-issue	T 2
/P.B./		UniProt Accession No. A7CNQ7, Ju	ıly 5, 2004			
90000000000000000000000000000000000000		UniProt Accession No. Q5XEL1, No.	ov. 23, 2004			
) 1000000000000000000000000000000000000		UniProt Accession No. Q8P318, Oc	ct. 1, 2002			
000000000000000000000000000000000000000		VALLET et al., "The chaperone/ush Identification of fimbrial gene clus formation," PNAS, Vol. 98, No. 12,	ters (cup) and	d their involvemen	-	
000000000000000000000000000000000000000		WATNICK et al., "Steps in the deve Molecular Microbiology, Vol. 34, N	•		Tor biofilm,"	
,		WESSELS et al., "Stimulation of protective antibodies against type 1a and 1b group B streptococci by a type 1a polysaccharide-tetanus toxoid conjugate vaccine," Inf. Immun. 61, 4760-66, 1993				
		WOODSON et al., "Analysis of a rik Microbiology 140, 1829-38, 1994	oose transpor	t operon from Bac	illus subtilis,"	
/P.B./		ZHONG et al., "Hypothetical prote AAD29767, May 11, 1999	in of Arabido	psis thaliana," NCB	l Accession No.	

Examiner Signature	/Padmavathi Baskar/	Date Considered	11/04/2009
-----------------------	---------------------	--------------------	------------

